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Sony Corporation Printed in Japan

SONY VPH-D50Q/VPH-D50QM

SONY

3-858-829-**15** (2)

Multiscan Projector

Operating Instructions EN

Mode d’emploi F

Manual de instrucciones E

VPH-D50Q
VPH-D50QM

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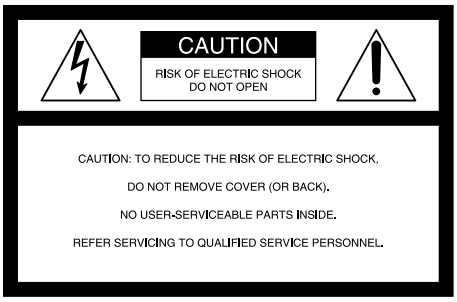
WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.



This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the USA

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference wll not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

For the customers in Canada

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

For the customers in the United Kingdom

WARNING
THIS APPARATUS MUST BE EARTHED

IMPORTANT

This wires in this mains lead are coloured in accordance with the following code:

Green-and-Yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow.
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Voor de klanten in Nederland

- Dit apparaat bevat een Li-ion batterij voor memory back-up.
- De batterij voor memory back-up van het geheugen is bevestigd op IC2016 van plaat A.
- Raadpleeg uw leverancier over de verwijdering van de batterij op het moment dat u het apparaat bij einde levensduur afdankt.
- Gooi de batterij niet weg, maar lever hem in als KCA.
- Bij dit product zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

The socket-outlet should be installed near the equipment and be easily accessible.

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Precautions

On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply. If voltage adaptation is required, consult with qualified Sony personnel.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the unit from the wall outlet or set the MAIN POWER switch to OFF if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The wall outlet should be near the unit and easily accessible.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.

On installation

- When the projector is mounted on the ceiling, the Sony PSS-70 Projector Suspension Support must be used for installation. Read the installation manual of the PSS-70 carefully, since the ceiling should be reinforced for safety.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes. Leave space of more than 30 cm (12 inches) between the wall and the projector. Be aware that room heat rises to the ceiling; check that the temperature near the installation location is not excessive.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust or humidity, mechanical vibration or shock.
- To avoid moisture condensation, do not install the unit in a location where the temperature may rise rapidly.
- Fans are installed inside the projector to prevent internal heat build-up. The fans produce a humming noise when the power is switched on, which is normal. Should the noise sound abnormal, please consult qualified Sony personnel.

On illumination

- To obtain the best picture, the front of the screen should not be exposed to direct lighting or sunlight.
- Ceiling-mounted spot lighting is recommended. Use a cover over fluorescent lamps to avoid lowering the contrast ratio.
- Cover any windows that face the screen with opaque draperies.
- It is desirable to install the projector in a room where floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it is recommended that the carpet and wall paper be changed to a dark color.

On operation

To turn on the projector after the projector has been turned off due to a brief loss of power, press the POWER ON key on the remote control, or turn off the MAIN POWER switch so that the STANDBY indicator turns off and then turn on the MAIN POWER switch.

On cleaning

- To keep the cabinet looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner, benzene, or abrasive cleansers, since these will damage the cabinet.
- Avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.

CRT burns

When a static picture of a VCR or a computer is displayed for more than about an hour, a CRT burn may result. This means that an after-image impression of the static picture remains on the screen even after the picture has changed. If it is necessary to display the same static picture for more than an hour, we recommend that you set the CONTR (contrast) control to the lowest setting.
Also, when a picture of different size is displayed beyond a certain length of time, an after-image impression of the frame of the smaller picture may be burnt on the screen (such as displaying a 16:9 wide size picture on a 4:3 screen). To avoid this, we recommend that you use the same picture size when possible. However, if it is necessary to use a different picture size, set the CONTR (contrast) control and the BRT (brightness) control of the smaller picture to the lowest setting possible. This will minimize the risk of creating an after-image impression.
If the CRT burns, it must be replaced. In this case, refer to the warranty provided with this unit. Consult your Sony dealer or Qualified Service Personnel.

On repacking

Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

Features

Multiscan projector

This projector accepts and automatically detects horizontal scanning frequencies between 15 kHz and 64 kHz and vertical scanning frequencies between 38 Hz and 150 Hz.
In addition to high-resolution pictures from computers, you can also project pictures from teletext decoders, VCRs and video cameras.

High resolution and brightness

A newly developed 7-inch CRT and a hybrid Sony HACC (High-resolution Aspherical and Color Corrected) lens are incorporated in the projector to provide a sharp and bright high-quality picture with the high resolution of 1280 × 1024 pixels and the high light output of 160 lumen.

Easy operation—remote control, on-screen display

Adjustments such as input selection, picture control and centering adjustment can be remotely controlled from both the front and rear of the projector with the supplied remote control. You can also use the control as a wired remote control by connecting it to the projector with the supplied remote control cable.

Compatible with various color systems

NTSC, PAL, SECAM, NTSC4.43[1)] or PAL-M color system can be selected automatically or manually.

Flexible setup

You can project a 60- to 250-inch picture (120-inch standard) with this projector. The projector can be set up on the floor or ceiling, for front or rear projection to suit the installation location, surrounding illumination, usage, etc.

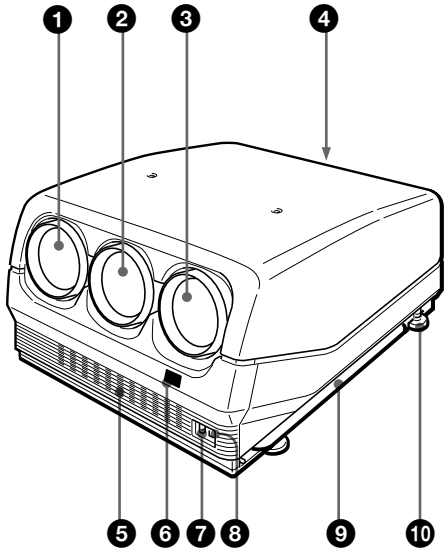
Illuminated control panel/remote control keys

The key names on the remote control and the control panel of the projector can be illuminated for easy access in a dark place by pressing the LIGHT button.

1) NTSC4.43 is the color system used when playing back a video recorded on NTSC on a NTSC4.43 system VCR.

Location and Function of Controls

Front



1 Blue lens

2 Green lens

3 Red lens

4 Control panel
For details, see "Control Panel" on page 9 (EN).

5 Front ventilation hole

6 Front remote control detector

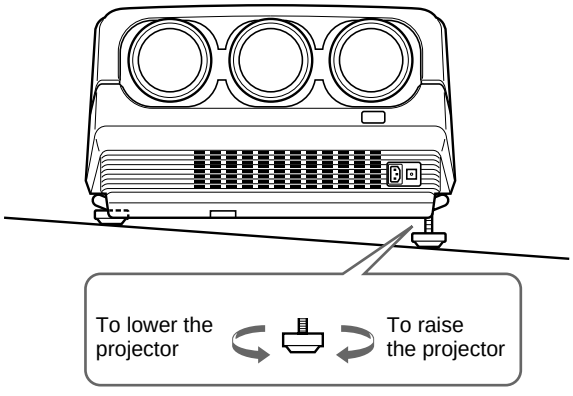
7 AC IN socket

8 MAIN POWER switch

9 Handles
Used for carrying the projector. The handles are located on the right and left sides.

10 Adjusters
Used to keep the projector level if it is installed on an uneven surface (equipped with four adjusters).

How to use the adjusters



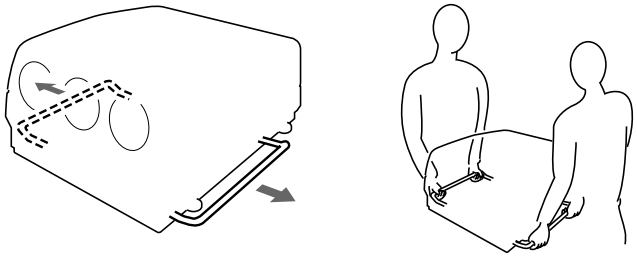
While lifting the projector, turn the adjusters to adjust the height so that the projector becomes level.

Note

Be careful not to let the projector down on your fingers.

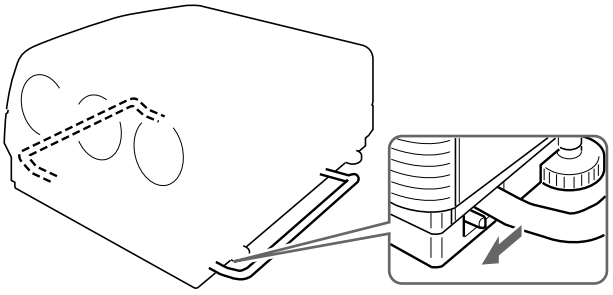
Using the handles

Pull out the side handles.



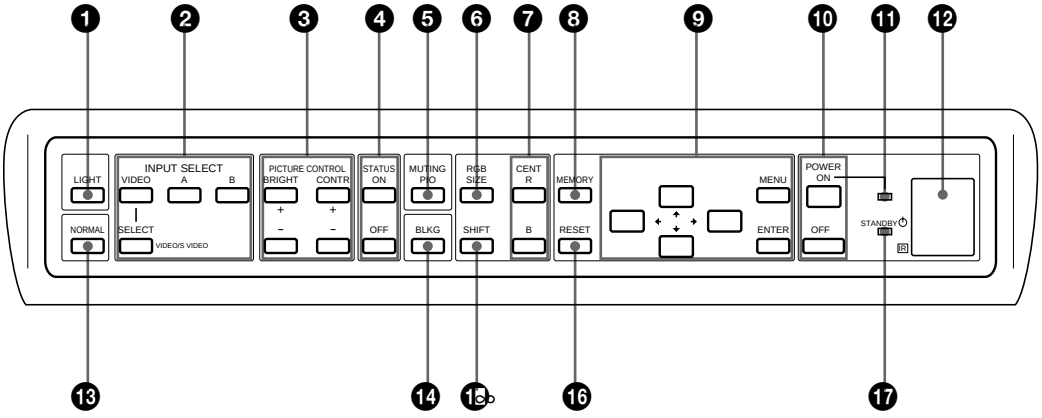
Putting away the handles

Pull the handle release lever under each handle towards you. The handle is automatically retracted.



Control Panel

The keys with the same names as those on the remote control have the same functions. The functions of the keys and switches that are not on the control panel can be selected with the menu operation.



❶ LIGHT key

Illuminates the key indicators on the control panel. The key indicators turn off if you press the LIGHT key again.

If you do not press any key for more than 30 seconds, the indicators also turn off automatically.

❷ INPUT SELECT keys

Select the input signal.

VIDEO: The video or S video signal input from the VIDEO IN or S VIDEO IN (or Y/C IN) connectors

SELECT VIDEO/S VIDEO: Selects the signal input from the VIDEO IN or S VIDEO IN (or Y/C IN) connectors by pressing this key after pressing the VIDEO key.

A: The RGB, component or HDTV signal input from the INPUT A connectors

B: The signal input from the INPUT B section when the optional interface board other than the IFB-40 is installed

Note

To switch the input signal from the INPUT A or INPUT B to the S VIDEO IN (or Y/C IN) connectors, first press the VIDEO key, then press the SELECT VIDEO/S VIDEO key.

❸ PICTURE CONTROL keys

Adjust the picture conditions: CONTR (contrast) and BRIGHT (brightness).

❹ STATUS ON/OFF key

Press OFF to eliminate the on-screen display.

Press ON to restore the on-screen display.

Note

The menus and warning messages appear even if the OFF key is pressed.

❺ MUTING PIC key

Cuts off the picture. To restore the picture, press the key again.

❻ RGB SIZE key
Enters the size adjustment mode for the input signal. Next adjust the size of the picture using the four arrow keys.
← : to reduce horizontal size
→ : to expand horizontal size
↑ : to expand vertical size
↓ : to reduce vertical size
Press the MEMORY key ❽ to store the adjusted value and display the adjusted picture.

❼ CENT R/B keys
Enter the centering adjustment mode of the red and blue.
R: Press to enter the red centering adjustment mode.
B: Press to enter the blue centering adjustment mode.
Perform the centering adjustment using the four arrow keys.

❽ MEMORY key
Stores various adjusted data into memory.

❾ Menu operation keys
Used for various adjustment functions and for menu operations.
MENU: Displays the main menu. Press it again to turn off the menu.
Arrow keys: Adjusts the value or selects the item in the menu.
ENTER: Stores the settings in the menu.

❿ POWER ON/OFF keys
Turn on and off the projector when the MAIN POWER switch on the projector is set to ON.

⓫ POWER ON indicator
Lights in green when the power of the projector is on.

⓬ Error code window/rear remote control detector
Indicates an error code when an operational error occurs.

⓭ NORMAL key
Erases the test pattern or cancels the various adjustment modes.

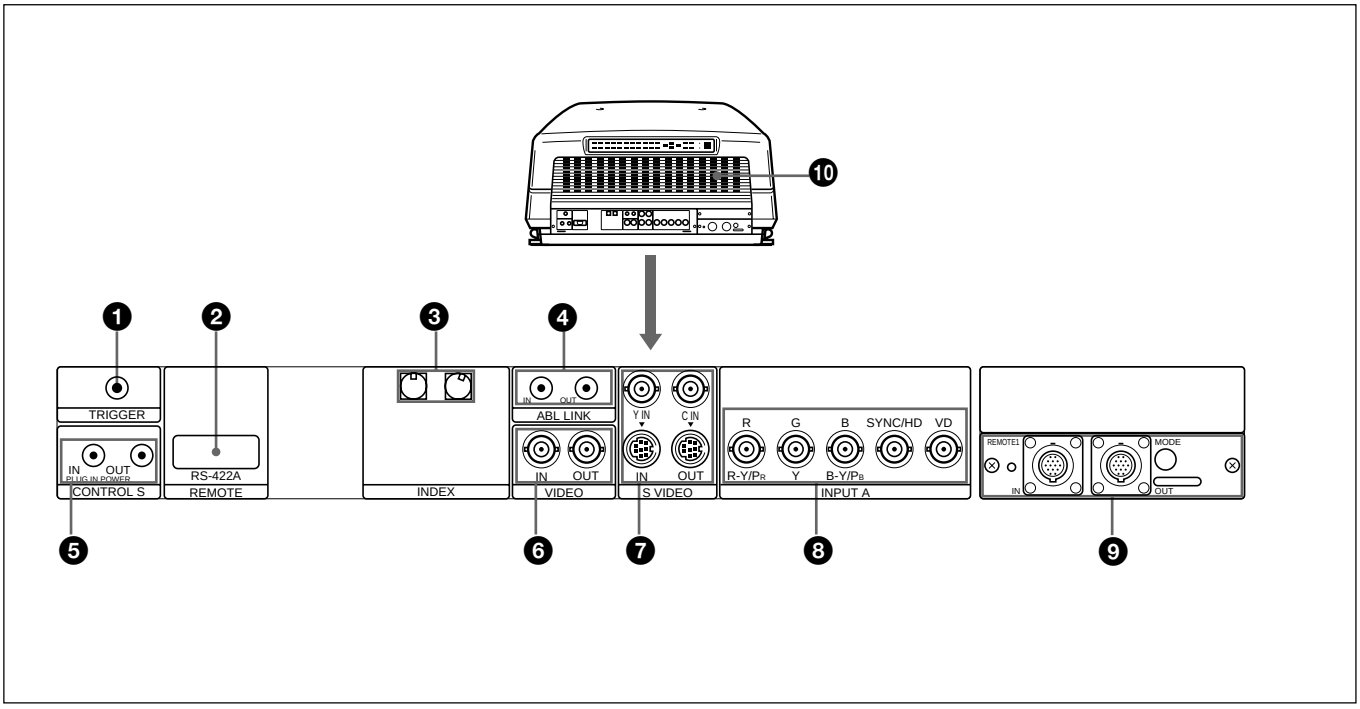
⓮ BLKG (blanking) key
Enters the blanking adjustment mode.
You can adjust the blanking with the four arrow keys.

⓯ RGB SHIFT key
Enters the shift adjustment mode for the input signal. Next adjust the position of the picture using the four arrow keys. The picture shifts in the direction of the arrow on the pressed key.
Press the MEMORY key ❽ to store the adjusted value and display the adjusted picture.

⓰ RESET key
Resets the adjusted levels to the factory preset or service adjusted levels.

⓱ ⏻ STANDBY indicator
Lights in orange when the projector is turned on with the MAIN POWER switch.

Rear



❶ TRIGGER connector (minijack)
When the projector is turned on, 5 V is output and when it is turned off, 0 V is output. However, the connector is not used as the power source since the power is not output.

❷ RS-422A REMOTE connector (D-sub 9-pin)
Used to expand the system connections using the RS-422A interface.
Before using the connector, remove the red cap.

❸ INDEX NO. switches
When multiple projectors are connected, set the index number of each projector.
To display the index number on the screen, press the NORMAL key, and the ENTER key on the remote control.

Note
If you set the index number to "00," the projector does not operate.

❹ ABL (Automatic Brightness Limiter) LINK IN/ OUT jacks (minijack)
When connecting multiple projectors, connects the ABL LINK OUT jack to the ABL LINK IN jack on another projector. You can synchronize the brightness limiting point among the projectors, allowing to make the whole screen brightness uniform.

❺ CONTROL S jacks
IN/PLUG IN POWER (5 V) jack (stereo minijack): Connects to the CONTROL S OUT jack of other Sony equipment. Also connects to the CONTROL S OUT jack of the supplied remote control with the supplied remote control cable (stereo cable) to be used as a wired remote control. In this case, this jack supplys 5 V to the remote control as power source.
OUT jack (stereo minijack): Connects to the CONTROL S IN jack of other Sony equipment.

Note
When using this jack, the remote control detector on the projector does not function.

❻ VIDEO IN/OUT connectors

VIDEO IN connector (BNC type): Connects to the composite video output of the video equipment.

VIDEO OUT connector (BNC type): Connects to the composite video input of a color monitor.

❼ S VIDEO IN/OUT connectors

Y IN, C IN connectors (BNC type): Connects to the Y and C video outputs of the video equipment.

S VIDEO IN/OUT connectors (4-pin, mini-DIN type): Connects to the S video output or input of the video equipment.

Note

The S VIDEO IN connector is disconnected when a cable is connected to the Y/C IN connectors.

❽ INPUT A connectors (BNC type)

R/R-Y/P_R, G/Y, B/B-Y/P_B, SYNC/HD, VD connectors: Connect to the outputs of a computer or a video camera. According to the connected equipment, the RGB (R, G, B), component (R-Y, G, B-Y) or HDTV (P_R, Y, P_B) signal is selected.

❾ Signal interface board attachment part (INPUT B)

The IFB-40 Signal Interface Board is installed by default. Other optional signal interface boards can be attached to this section instead of the IFB-40.

Indicator (red): Lights up when the input of the IFB-40 is selected.

REMOTE 1 IN connector (14-pin multi): When connecting two projectors, connect to the REMOTE 1 OUT connector on the IFB-40 installed to another projector.

REMOTE 1 OUT connector (14-pin multi): Connect to the REMOTE 1 IN connector on the IFB-40.

MODE selector: Turn the control switch of the MODE selector to the appropriate position according to the length of the cable connected to the REMOTE 1 OUT connector.

Cable length	up to 2 m	up to 10 m	up to 25 m	up to 50 m
Type of cable	SIC-M-1 CCQ-2BRS	SIC-M-5 CCQ-5BRS CCQ-10BRS	SIC-M-15 CCQ-25BRS SIC-M-25	SIC-M-50 CCQ-50BRS
Position	1	2	3	4

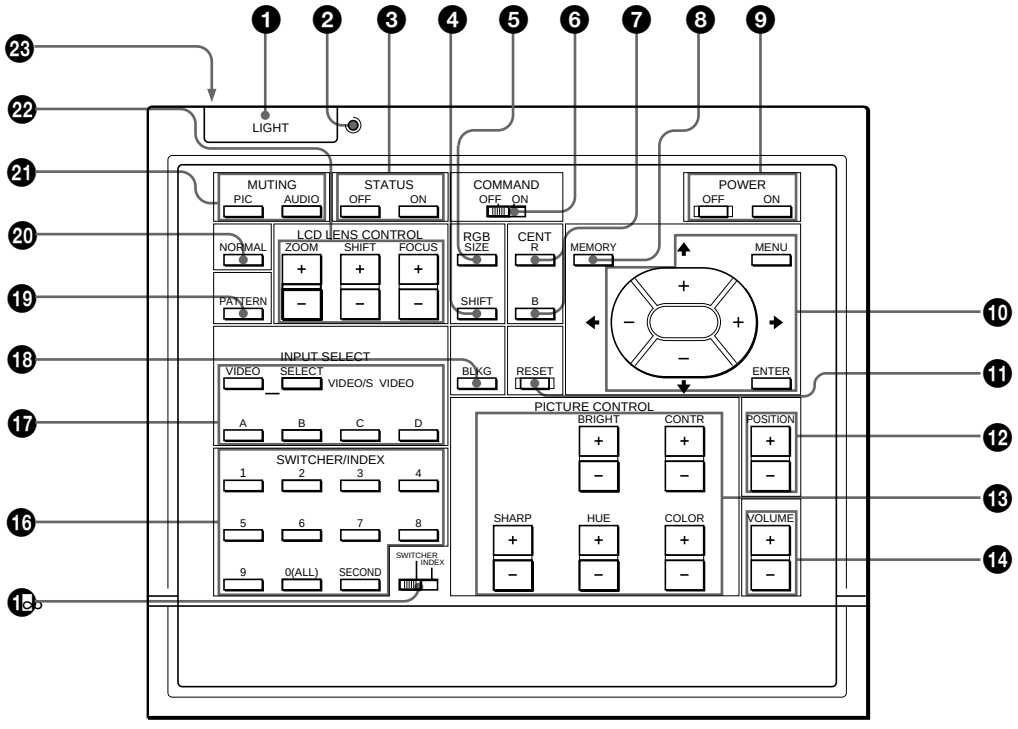
❿ Rear ventilation hole

Remote Control

The remote control may be used as a wired or wireless remote control.
The keys with the same names as those on the control panel have the same functions.

Note

The VOLUME +/– ⓮, INPUT SELECT C and D ⓱, AUDIO MUTING ㉑ and LCD LENS CONTROL ㉒ keys do not function with this projector.



❶ LIGHT button

Illuminates the key indicators when the COMMAND switch ❻ is set to ON. If the COMMAND switch is set to OFF, only the COMMAND switch is illuminated. The key indicators turn off if you press the LIGHT button again.
If you do not press any key for more than 30 seconds, the indicators also turn off automatically.
When the remote control is connected to the CONTROL S IN/PLUG IN POWER jack of the projector via the remote control cable, the power is supplied to the remote control from the projector.

❷ Transmission indicator

Lights each time you press a key. If it does not light, replace the batteries with new ones.

❸ STATUS ON/OFF key

Press OFF to eliminate the on-screen display.
Press ON to restore the on-screen display.

Note

The menus and warning messages appear even if the OFF key is pressed.

❹ RGB SHIFT key
Enters the shift adjustment mode for the input signal. Next adjust the position of the picture using the four arrow keys. The picture shifts in the direction of the arrow on the pressed key.
Press the MEMORY key ❽ to store the adjusted value and display the adjusted picture.

❺ RGB SIZE key
Enters the size adjustment mode for the input signal. Next adjust the size of the picture using the four arrow keys.
← : to reduce horizontal size
→ : to expand horizontal size
↑ : to expand vertical size
↓ : to reduce vertical size
Press the MEMORY key ❽ to store the adjusted value and display the adjusted picture.

❻ COMMAND ON/OFF switch
No key on the remote control except the LIGHT button ❶ function when this switch is set to OFF. This saves battery power.

❼ CENT R/B keys
Enter the centering adjustment mode of the red and blue.
R: Press to enter the red centering adjustment mode.
B: Press to enter the blue centering adjustment mode.
Perform the centering adjustment using the four arrow keys.

❽ MEMORY key
Stores various adjusted data into memory.

❾ POWER ON/OFF key
Turns on and off the projector when the MAIN POWER switch on the projector is set to ON.

❿ Menu operation keys
Used for various adjustment functions and for menu operations.
MENU: Displays the main menu. Press it again to turn off the menu.
Arrow keys: Adjusts the value or selects the item in the menu.
ENTER: Stores the settings in the menu.

⓫ RESET key
Resets the adjusted levels to the factory preset or service preset levels.

⓬ POSITION +/– keys
Select the position to be adjusted on the screen in blanking adjustment mode.
Also, set V SHIFT to WIDE or NARROW in the RGB input signal's SHIFT adjustment mode.

⓭ PICTURE CONTROL keys
Adjust the picture conditions: CONTR (contrast), BRIGHT (brightness), COLOR, HUE and SHARP (sharpness).

⓮ VOLUME +/– keys
These keys do not function with this projector.

⓯ SWITCHER/INDEX select switch
Selects the function of the SWITCHER/INDEX keys.
Set to SWITCHER to select the input from the PC-1271/1271M Signal Interface Switcher.
Set to INDEX to assign the index number of each projector when multiple projectors are used.

⓰ SWITCHER/INDEX keys
When the SWITCHER/INDEX select switch is set to SWITCHER
When the PC-1271/1271M switcher (not supplied) is connected to the projector, press a number key (1 – 8) to select the input from the switcher. The number key 9 does not function.
To select the input from the second switcher (when the SINGLE/SECOND/OTHER switch on the switcher is set to SECOND), press a number key between 1 and 8 within two seconds after pressing the SECOND key.
When the SWITCHER/INDEX select switch is set to INDEX
When multiple projectors are connected, select the index number, which is set with the INDEX NO. switch on the rear panel, of the projector to be adjusted. Press a number key (1 – 9) to designate the index number, then press the ENTER key. When adjusting all the projectors simultaneously, press the 0 (ALL) key, then the ENTER key.

⓱ INPUT SELECT keys

Select the input signal.

VIDEO: The video or S video signal input from the VIDEO IN or S VIDEO IN (or Y/C IN) connectors

SELECT VIDEO/S VIDEO: Selects the signal input from the VIDEO IN or S VIDEO IN (or Y/C IN) connectors by pressing this key after pressing the VIDEO key.

A: The RGB, component or HDTV signal input from the INPUT A connectors

B: The signal input from the INPUT B section when the optional interface board other than the IFB-40 is installed

C, D: These keys do not function with this projector.

Note

To switch the input signal from the INPUT A or INPUT B to the S VIDEO IN (or Y/C IN) connectors, first press the VIDEO key, then press the SELECT VIDEO/S VIDEO key.

⓲ BLKG (blanking) key

Enters the blanking adjustment mode.
You can adjust the blanking with the four arrow keys.

⓳ PATTERN key

Displays the internal test patterns of the projector. Each press of the key displays CROSS HAIR, HATCH (9×9), ME and COLOR BAR patterns, sequentially.

⓴ NORMAL key

Erases the test pattern or cancels the various adjustment modes.

㉑ MUTING keys

PIC (picture): Cuts off the picture. To restore the picture, press the key again.

AUDIO: This key does not funcion with this projector.

㉒ LCD LENS CONTROL keys

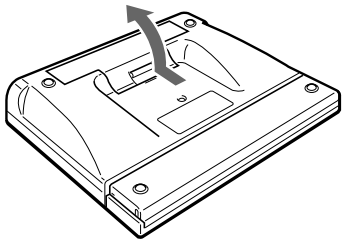
These keys do not function with this projector.

㉓ CONTROL S OUT jack

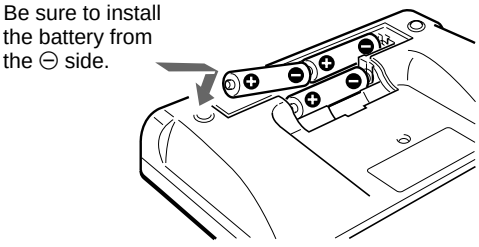
Connects to the CONTROL S IN/PLUG IN POWER jack on the projector for wired remote control application.

Battery installation

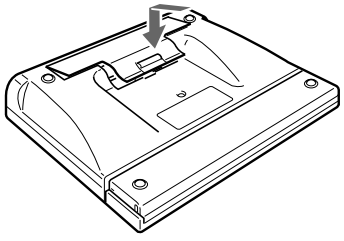
1 Push to open the lid.



2 Install the three size AA (R6) batteries (supplied) with the correct polarity.



3 Replace the lid.



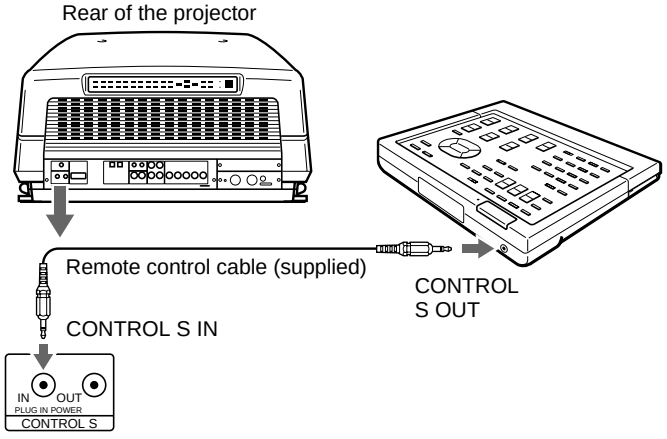
Notes on batteries

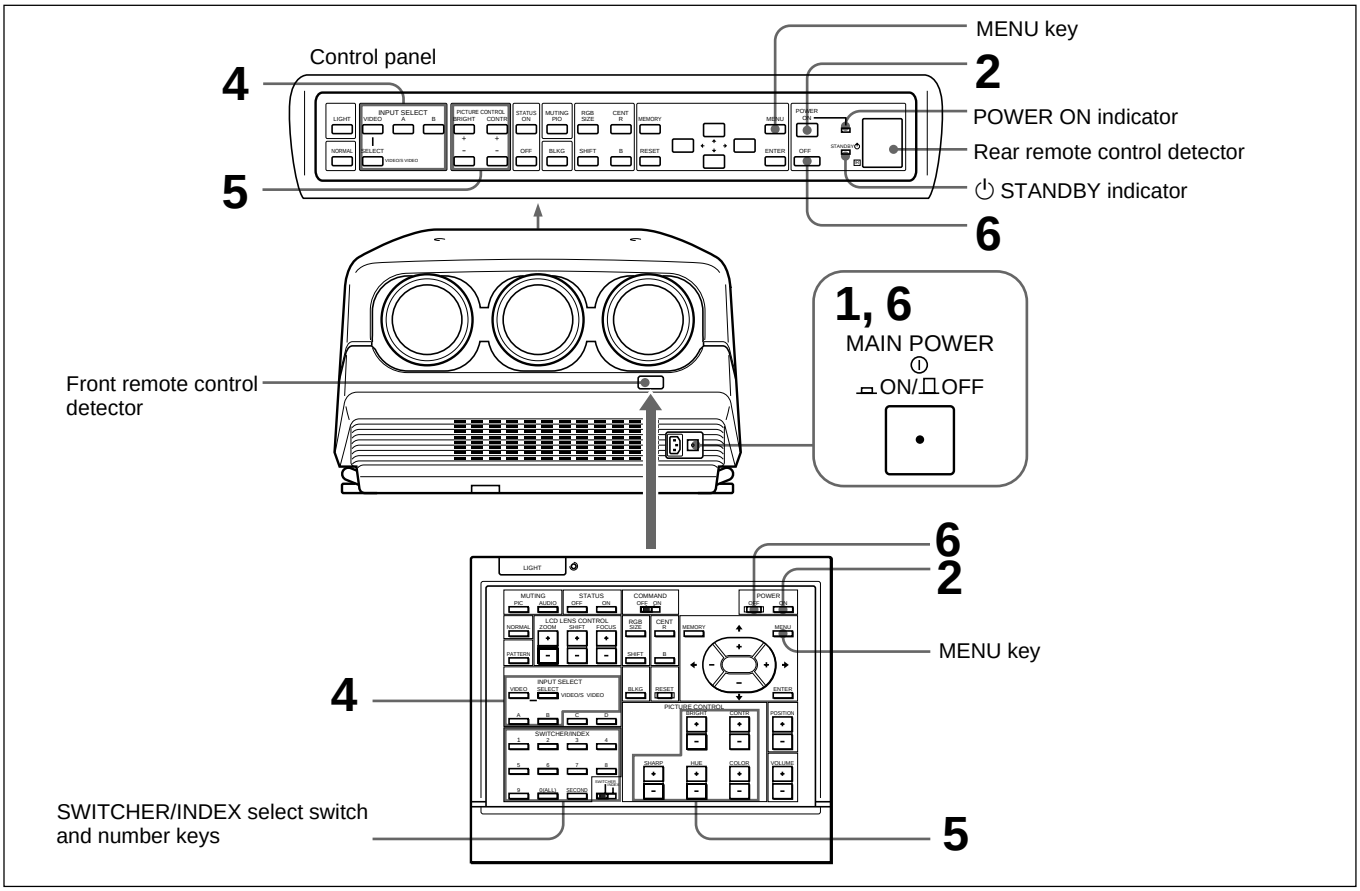
- Be careful that the battery orientation is correct when inserting batteries.
- Do not mix old battery with new one, or different types of batteries.
- If you do not intend to use the remote control for a long time, remove the batteries to avoid damage from battery leakage. If a battery has leaked, remove the batteries, wipe the battery compartment dry and replace the batteries with new ones.

Notes on wireless remote control operation

- Be sure that there is nothing to obstruct the infrared beam between the remote control and the projector.
- The operation range is limited. The shorter the distance between the remote control and the projector, the wider the angle within which the remote control can control the projector.
- The remote control detectors on the projector do not operate when the remote control is being used as a wired remote control. If you wish to use the remote control as a wireless remote control, be sure to remove the connecting cable from both the remote control and the projector.

Connecting the remote control to the projector





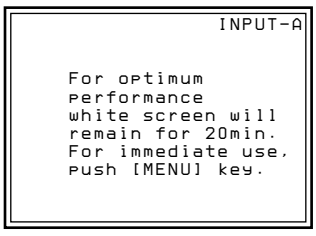
1 Press the MAIN POWER switch on the front of the projector.

The ⏻ STANDBY indicator on the control panel lights in orange and the projector goes into the standby mode.

2 Press the POWER ON key on the remote control or the control panel.

The POWER ON indicator lights in green.

A white screen with the message shown below (warming up screen) appears on the screen. Make sure to allow the projector to warm up for 20 minutes after turning it on.
The message disappears temporarily in about 35 seconds, and will appear subsequently for 5 seconds every 30 seconds.



Press the MENU key to cancel the warming up screen and see the picture immediately after the projector is turned on if, for example, the adjustment has been finished and warming up is not needed.

(continued)

3 Turn on the power of the connected equipment.

4 Select the input signal to be projected by pressing the INPUT SELECT key.

VIDEO and SELECT keys: To project the signal input from the equipment connected to the VIDEO IN or S VIDEO IN (or Y/C IN) connectors. Select VIDEO or S VIDEO by pressing the VIDEO key, then the SELECT key.

A: To project the RGB, component or the HDTV signal input from the equipment connected to the INPUT A connectors.

B: To project the signal input from the equipment connected to the optional interface board other than the IFB-40 installed to the INPUT B section.

When the PC-1271/1271M Signal Interface Switcher is connected: Set the SWITCHER/INDEX select switch on the remote control to SWITCHER and then select the input with the number keys 1 to 8. If two switchers are connected, press the SECOND key and then the number key to select the input from the second switcher.

Note

When you select the input signal connected to the INPUT A or INPUT B section, be sure to select the correct signal in the SET SETTING menu. If an incorrect signal is selected, picture may be distorted.
For details, see "The SET SETTING Menu" on page 31 (EN).

5 Adjust the picture.
For details, see "Adjusting the Picture" on page 19 (EN).

6 To turn the power off, press the POWER OFF key on the remote control or on the control panel of the projector, then set the MAIN POWER switch on the projector to OFF.

To	Press
Trun off the on-screen display	the STATUS OFF key. The menus and warning messages appear even if the OFF key is pressed. To restore the on-screen display, press the STATUS ON key.
Cut off the picture	the MUTING PIC key. To restore the picture, press the MUTING PIC key.

Adjusting the Picture

Adjust the picture for your preference. The adjustment data can be saved in the memory.

1 Adjust with the PICTURE CONTROL +/– keys.

Only the remote control is equipped with the COLOR, HUE and SHARP keys.

BRIGHT	Brightness
CONTR	Picture contrast
COLOR	Color intensity
HUE	Hue
SHARP	Sharpness

The adjustment levels are digitally displayed with a range of MIN, 1, 2, ... 99, MAX.

2 Press the MEMORY key to save the data.

Dynamic picture mode (only for the video or component input pictures)

You can get high quality picture contrast by setting D.PICTURE to ON in the PIC CTRL menu.

For details, see "PIC CTRL (Picture Control) menu" on page 26 (EN).

Restoring the initial data

1 Press the PICTURE CONTROL key of the item which you want to reset to the initial data.

2 Press the RESET key.

The selected item is reset to the initial data.

Notes

- The COLOR, SHARP and HUE keys do not function on the pictures input from the RGB IN connectors.
- The HUE and COLOR keys do not function if the input signal is black and white.
- The HUE key does not function with the PAL or SECAM color input source.

Adjusting the Size And Shift of the Picture

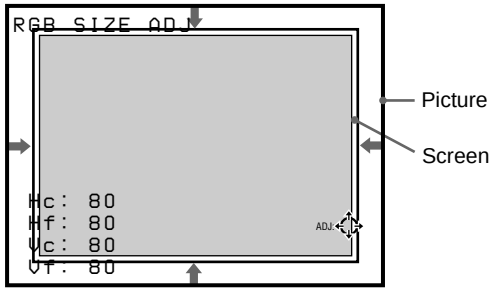
The size and shift of the input picture can be adjusted to fit the screen.

SIZE adjustment

Adjust the picture size if it does not fit the screen.

1 Press the RGB SIZE key.
(Use the RGB SIZE key even for the signal other than RGB.)

2 Adjust the picture size with the arrow keys.
- ↑ : The vertical size is expanded.
- ↓ : The vertical size is reduced.
- → : The horizontal size is expanded.
- ← : The horizontal size is reduced.



3 Press the MEMORY key to save the adjustment data.

Resetting to the initial preset size

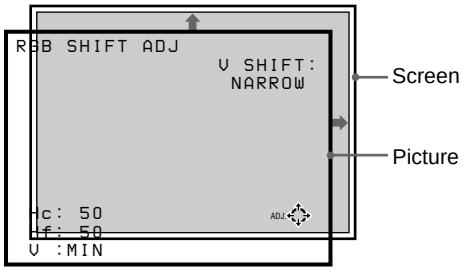
The picture size of the video signal can be reset to the initial preset size by pressing the RESET key in RBG SIZE adjustment mode. (The picture size of signals other than the video signal cannot be reset.)

SHIFT adjustment

If the picture needs to be shifted to fit the screen, adjust the position of the picture.

1 Press the RGB SHIFT key.
(Use the RGB SHIFT key even for the signal other than RGB.)

2 Adjust the shift with the arrow keys.
- ↑ : The picture is shifted upward.
- ↓ : The picture is shifted downward.
- → : The picture is shifted rightward.
- ← : The picture is shifted leftward.



Notes

When the RGB signal is input, the adjustable range of the vertical shift (V SHIFT) can be set to WIDE or NARROW by pressing the POSITION +/– keys.
When the video signal is input, V SHIFT is automatically fixed to NARROW and the adjustable range of the vertical shift will become narrower than that of the RGB signal.

3 Press the MEMORY key to save the adjustment data.

Resetting to the initial preset position

The position of the picture of the video signal can be reset to the initial preset position by pressing the RESET key in RGB SHIFT adjustment mode. (The position of the picture of signals other than the video signal cannot be reset.)

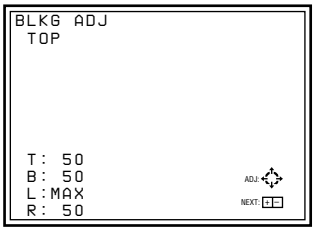
Blanking adjustment

If the displayed picture is larger than the screen, cut off the excess parts.

1 Press the BLKG key.

2 Press the POSITION +/– keys on the remote control to select the part to be adjusted.

- When you press the + key, the position cycles through the following order:
  TOP → BOTTOM → LEFT → RIGHT → TOP…
- When you press the – key, the position cycles in reverse order.



3 Adjust with the arrow keys.

- Press the ↑ and ↓ keys to adjust the TOP and BOTTOM positions.
- Press the ← and → keys to adjust the LEFT and RIGHT positions.

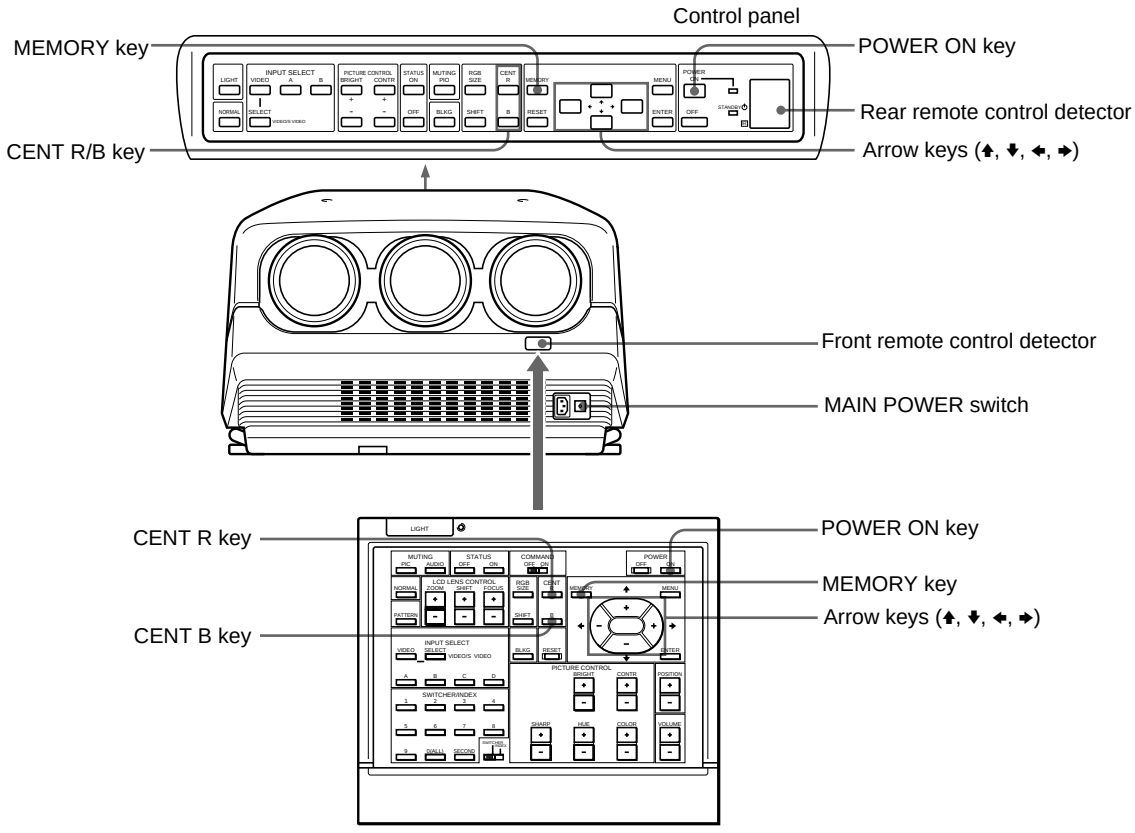
4 Press the MEMORY key to save the adjustment data.

Note

When you connect multiple video input sources to the projector, such as when using the switcher, adjust the picture size, picture shift and blanking for each input connector.

Centering Adjustment

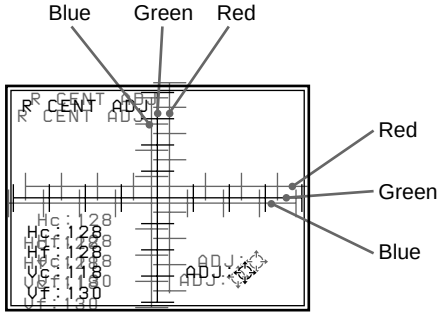
The three colors, red, green and blue must converge for correct projection. If they do not converge, centering adjustment is necessary.



1 Turn the projector on by switching on the MAIN POWER switch and pressing the POWER ON key on the remote control.

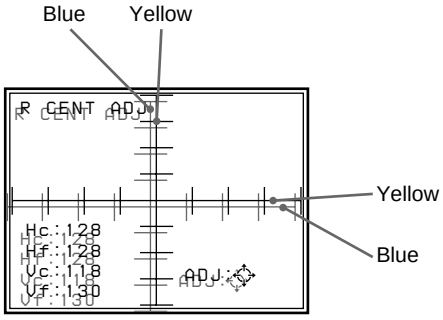
2 Press the CENT R key.

The built-in CROSS HAIR test pattern appears and the red line will be adjustable.



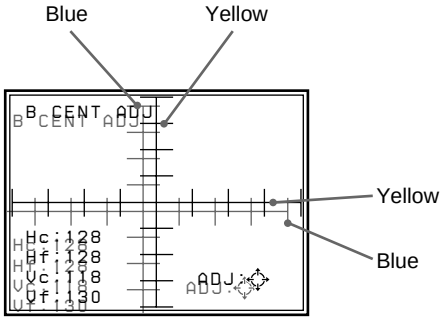
3 Press the arrow keys to move the red line until the red and green lines converge and become yellow.

The red line moves according to the direction of the arrow.



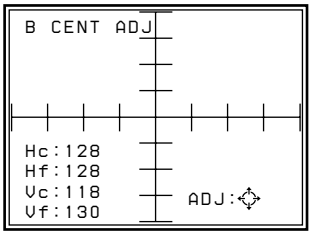
4 Press the CENT B key.

The blue line will be adjustable.



5 Press the arrow keys to move the blue line until the blue and yellow lines converge.

The blue line moves according to the direction of the arrow.
When all three color lines converge, the test pattern will become white.



6 Press the MEMORY key.

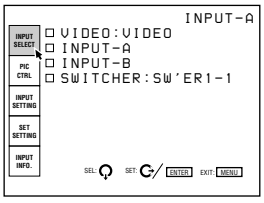
The normal display is restored.

Using the Menu

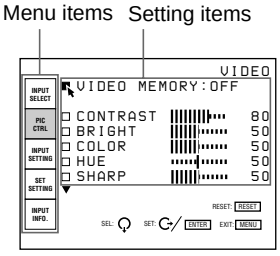
The projector is equipped with an on-screen menu for making various adjustments and settings.
The language used in the menu can be changed to French, German, Italian, Spanish, Japanese or Chinese.
For details, see "LANGUAGE" on page 32 (EN).

Basic Menu Operation

1 Press the MENU key.
The menu display appears.
The menu presently selected is highlighted in blue.



2 Use the ↓ or ↑ keys to select a menu, then press the → key or the ENTER key.
The selected menu appears.
The setting items that are indicated in white cannnot be selected.



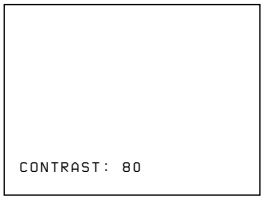
3 Use the ↓ or ↑ keys to select a setting item, then press the → key or the ENTER key.
The adjustment menu or the setting menu (pop-up menu) appears.

If there are two or more pages for a menu
The ▼ indication appears below the bottom item.
To go to the next page, move the cursor to the bottom item with the ↓ key, then press the ↓ key.
To go back to the previous page, move the cursor to the top item with the ↑ key, then press the ↑ key.

4 Make adjustment or setting on the menu.

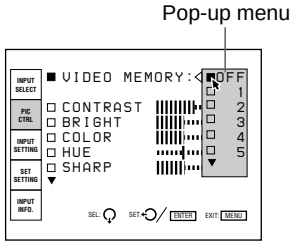
To change the adjustment level

To increase the level, press the ↑ or → key.
To decrease the level, press the ↓ or ← key.
Then press the ENTER key to store the level. The original screen is restored.



To select an item

Use the ↓ or ↑ key to select an item in a pop-up menu, then press the ← key or the ENTER key. The selected setting is stored and the pop-up menu disappears.



For details on setting individual items, see the relevant menu pages.

To clear the menu display

Press the MENU key.
The menu display also disappears automatically if no key is pressed for about one minute.

To reset the settings that have been adjusted

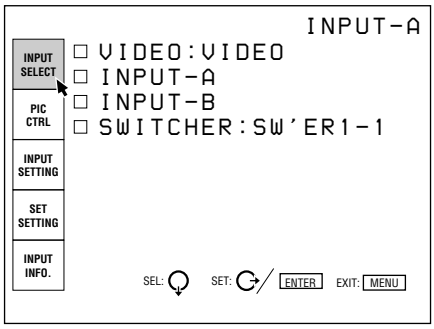
Press the RESET key. "Reset complete!" appears on the screen and the settings appearing on the screen will be reset to the factory preset or service adjusted levels.

Memory of the settings

The settings in the menus are automatically stored in the projector memory. You can also store the setting by pressing the MEMORY key.

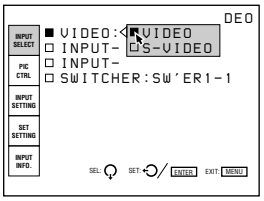
The INPUT SELECT Menu

The INPUT SELECT menu is used for selecting the input signal.
Items that can be selected are highlighted in green.
You cannot select the items indicated in white.



VIDEO

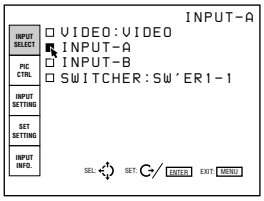
Selects signal input from the VIDEO IN or S VIDEO IN (or Y/C IN) connectors.



Select VIDEO or S-VIDEO in the pop-up menu.

INPUT-A

Selects signal input from the INPUT A connectors.

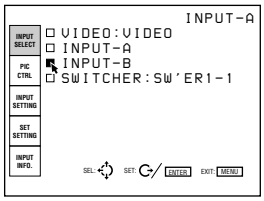


Notes

- When the PC-1271/1271M Signal Interface Switcher is connected to the INPUT A connectors using the 5BNC cables, INPUT-A cannot be selected.
- If the setting of INPUT-A in the SET SETTING menu is incorrect, the picture may be distorted.
  For details, see page 31 (EN).

INPUT-B

Selects signal input from the connectors on the signal interface board (not supplied) installed to the INPUT B section.

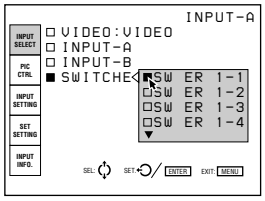


Notes

- When the PC-1271/1271M Signal Interface Switcher is connected to the projector via the IFB-40 Signal Interface Board installed to the INPUT B section, INPUT-B cannot be selected.
- If the setting of INPUT-B in the SET SETTING menu is incorrect, the pictue may be distorted.
  For details, see page 31 (EN).

SWITCHER

When the PC-1271/1271M Signal Interface Switcher is connected to the projector, selects signal input from the switcher.



You can select SW'ER1-1 to SW'ER2-8 in the pop-up menu. They are always displayed in green even when no signal is input.

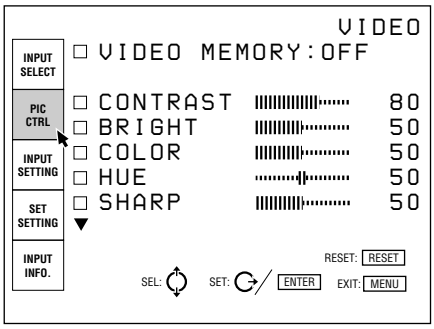
Note

SWITCHER can be selected only when the IFB-40 Signal Interface Board is installed to the INPUT B section, or when 5BNC MODE in the SET SETTING menu is set to ON.

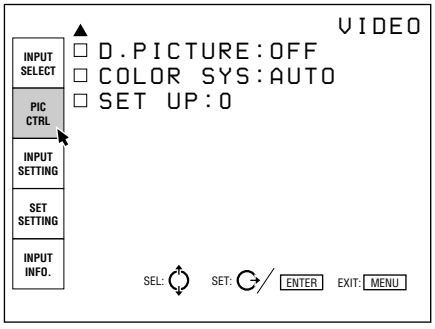
The PIC CTRL (Picture Control) Menu

The PIC CTRL menu is used for adjusting the picture. Items that can be adjusted are highlighted in green. You cannot select the items indicated in white.

Page 1

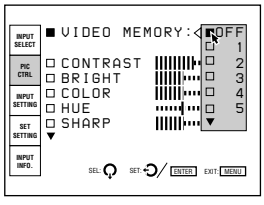


Page 2



VIDEO MEMORY

Selects a memory number of the adjusted picture levels.



Select a number from 1 to 10 in the pop-up menu, then the picture levels that have been adjusted will be stored in the number of the projector's memory.
If you want to use the data at the factory preset levels, select OFF.
The items to be stored in the VIDEO MEMORY are shown in the table of the memory architecture under “Input memory” (except for the items, “clamp position” and “registration”).

CONTRAST

Adjusts the picture contrast.

The higher the setting, the greater the contrast.
The lower the setting, the lower the contrast.

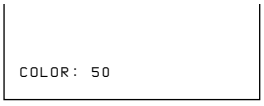
BRIGHT

Adjusts the picture brightness.

The higher the setting, the brighter the picture.
The lower the setting, the darker the picture.

COLOR

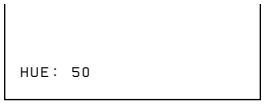
Adjusts color intensity.



The higher the setting, the greater the intensity.
The lower the setting, the lower the intensity.

HUE

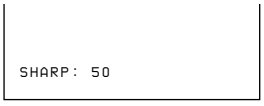
Adjusts skin tones.



At high settings, the picture becomes greenish.
At low settings, the picture becomes purplish.

SHARP

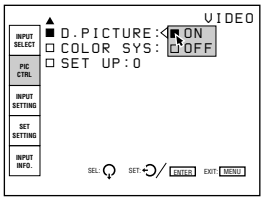
Adjusts the picture sharpness.



The higher the setting, the sharper the picture.
The lower the setting, the softer the picture.

D. (Dynamic) PICTURE

Emphasizes the black of the composite video, S video (Y/C) or component signal.

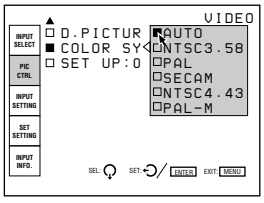


ON: Emphasizes the black to produce a bolder "dynamic" picture.

OFF: Reproduces the dark portions of the picture accurately, in accordance with the source signal.

COLOR SYS (System)

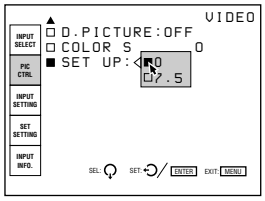
Selects the color system of the composite video or S video (Y/C) signal.



Normally, set to AUTO.
If the picture is distorted or colorless, select the color system according to the input signal.

SET UP

Changes the set up level (standard black level) to 0 IRE or 7.5 IRE according to the NTSC source signal.



0 IRE: Normally, set to this position.

7.5 IRE: Set to this position when the black color is too light.

Input signals and adjustable/setting items

Items	Input signal			
	Video or S video (Y/C)	**Component**	**HDTV**	**RGB**
CONTRAST	Y	Y	Y	Y
BRIGHT	Y	Y	Y	Y
COLOR	Y	Y	Y	N
HUE	Y (NTSC3.58/ NTSC4.43 system only)	N	Y	N
SHARP	Y	Y	Y	N
D. PICTURE	Y	Y	N	N
COLR SYS	Y	N	N	N
SET UP	Y (NTSC3.58/ NTSC4.43 system only)	N	N	N

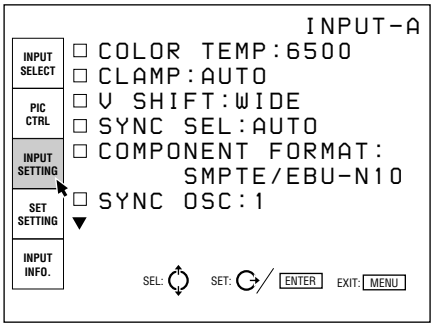
Y: Adjustable/can be set

N: Not adjustable/cannot be set

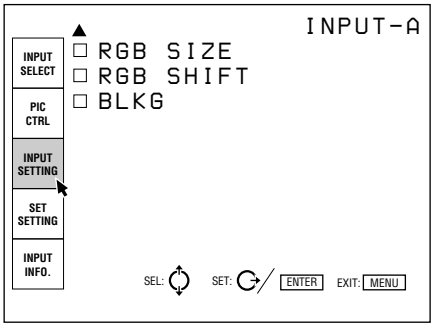
The INPUT SETTING Menu

The INPUT SETTING menu is used to adjust the input signal.
Items that can be adjusted are displayed in green.
You cannot select the items indicated in white.

Page 1

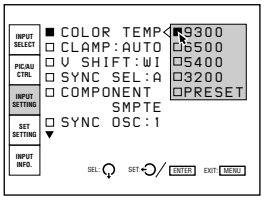


Page 2



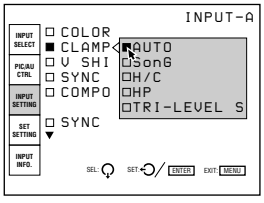
COLOR TEMP (Temperature)

Selects the appropriate color temperature according to your application and the input source signal.



CLAMP

Corrects the luminance of the input picture.



CLAMP is used as a standard for setting the black level of a picture correctly. The standard position of the clamp depends on the kind of sync signal being used. Normally, the projector CPU judges the signal and sets the position automatically. However, the CPU can misjudge the signal because of noise. If the luminance of the picture seems to be incorrect, the clamp position may need to be changed.

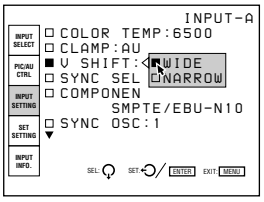
AUTO: Automatic setting mode. Normally set to this position.
SonG: Set to this position if the black seems too light or greenish.
H/C: Set to this position if the picture is too dark or luminance is unstable.
HP: If the luminance is still incorrect after changing to the SonG or H/C position, set to this position and perform the H-SHIFT adjustment.
TRI-LEVEL/S: Set to this position if the picture is dark when using the tri-level sync.

Note

If the luminance is still incorrect after changing the clamp setting, check the input signal and the connections.

V (vertical) SHIFT

Sets the adjustable range of the vertical shift of the input signal.



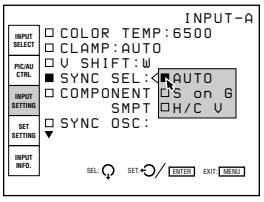
WIDE: Normally, set to this position (factory preset).
NARROW: When some signal such as a superimposed signal with unstable vertical sync. signal is input, the picture may be distorted vertically. In this case, set to this position. Adjustable range in the lower direction will become narrow.

Note

When the video, S video or component signal is input, V SHIFT is fixed to NARROW.

SYNC SEL (select)

Selects the sync signal.



AUTO: Automatic setting mode. Normally set to this position.
S on G: Set to this position if you project the picture using the sync on G signal.
H/C V: Set to this position if you project the picture using the external sync signal.

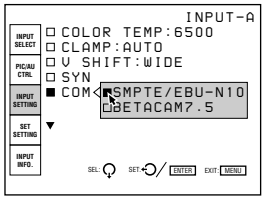
When an HDTV signal is input

You can select the items below instead of the above items.

INT: Set to this position when using the internal sync signal.
EXT (C): Set to this position when using the external composite sync signal.
EXT (HV): Set to this position when using the external horizontal/vertical sync signal.

COMPONENT FORMAT

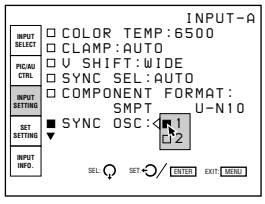
Selects the format of the component input signal.



SMPTE/EBU-N10: Set to this position if the input signal is the SMPTE or EBU-N10 format component signal.
BETACAM7.5: Set to this position if the input signal is the Betacam format component signal.

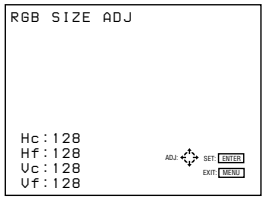
SYNC OSC (oscillation)

Normally, set to 1. When synchronization is distorted according to the type of the input signal, set to 2.



RGB SIZE

Adjusts the picture size of the input signal.

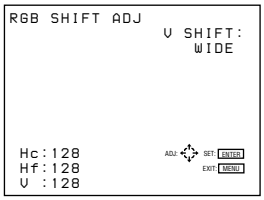


Use the ← or → key to adjust the horizontal size.
Use the ↑ or ↓ key to adjust the vertical size.

Hc and Hf show the size adjustment levels for the horizontal direction and Vc and Vf show those for the vertical direction. The higher the setting level, the greater the picture size.

RGB SHIFT

Adjusts the picture position of the input signal.

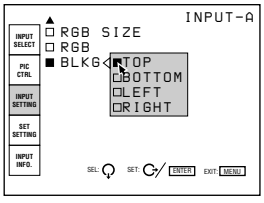


Use the ← or → key to adjust the horizontal position.
Use the ↑ or ↓ key to adjust the vertical position.

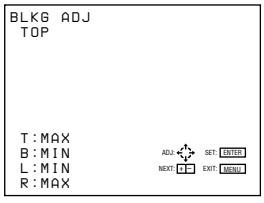
Hc and Hf show the shift adjustment levels for the horizontal direction and V shows the level for the vertical direction.

BLKG (Blanking)

Cuts off the excess parts if the displayed picture is larger than the screen.



Select the part to be adjusted among TOP, BOTTOM, LEFT and RIGHT, then press the → key or the ENTER key to display the blanking adjustment screen.



Use the ↑ or ↓ key to adjust the TOP and BOTTOM parts.
Use the ← or → key to adjust the LEFT and RIGHT parts.

Input signals and adjustable/setting items

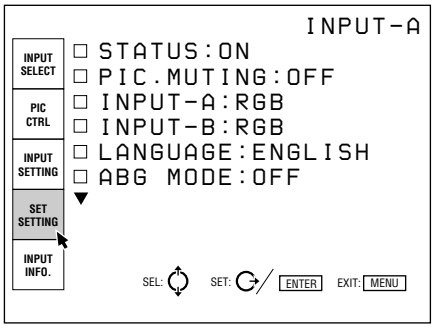
Items	Input signal			
	Video or S video (Y/C)	Component	HDTV	RGB
COLOR TEMP	Y	Y	Y	Y
CLAMP	N	N	Y	Y
V SHIFT	N	N	Y	Y
SYNC SEL	N	N	Y	Y
COMPONENT FORMAT	N	Y	N	N
SYNC OSC	Y	Y	Y	Y
RGB SIZE	Y	Y	Y	Y
RGB SHIFT	Y	Y	Y	Y
BLKG	Y	Y	Y	Y

Y: Adjustable/can be set
N: Not adjustable/cannot be set

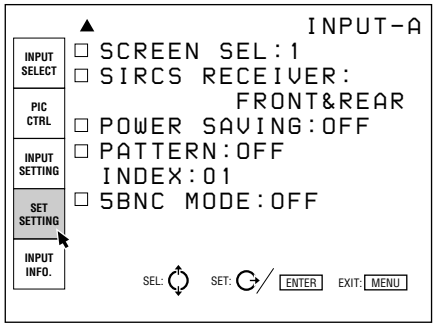
The SET SETTING Menu

The SET SETTING menu is used for changing the default settings of the projector.
Items that can be adjusted are highlighted in green.
You cannot select the items indicated in white.

Page 1

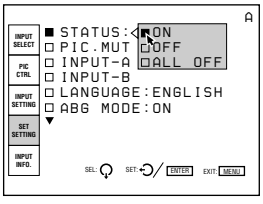


Page 2



STATUS

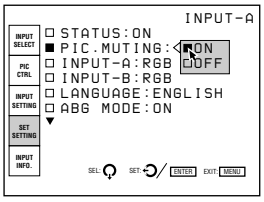
Selects the on-screen display mode.



ON: Shows all of the on-screen displays.
OFF: Turns off the on-screen displays except for "NO INPUT," "PIC MUTING," warning messages and menu displays.
ALL OFF: Turns off all of the on-screen displays except for warning messages and menu displays.

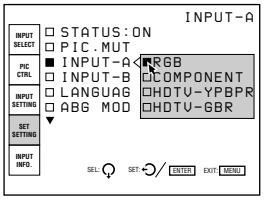
PIC. (picture) MUTING

Set to ON to cut off the picture.
When set to ON, "PIC MUTING" appears on the screen.



INPUT-A

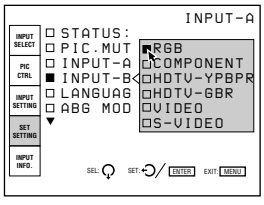
Selects the signal input from the INPUT A connectors.



RGB: Inputs the RGB signal.
COMPONENT: Inputs the component signal.
HDTV-YPBPR: Inputs the HDTV (YP_BP_R) signal.
HDTV-GBR: Inputs the HDTV(GBR) signal.

INPUT B

Selects the signal input from the IFB-12 Signal Interface Board (not supplied) installed to the INPUT B section.



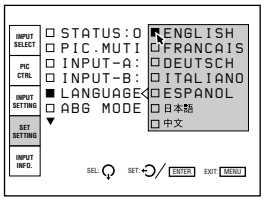
RGB: Inputs the RGB signal.
COMPONENT: Inputs the component signal.
HDTV-YPBPR: Inputs the HDTV (YP_BP_R) signal.
HDTV-GBR: Inputs the HDTV(GBR) signal.
VIDEO: Inputs the composite video signal.
S-VIDEO: Inputs the S video signal.

Note

When a signal interface board other than the IFB-12 is installed, the menu items cannot be selected.

LANGUAGE

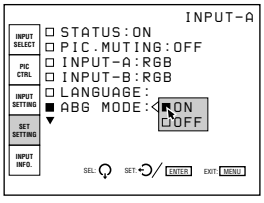
Selects the language used in the on-screen displays.



Available languages are: English, French, German, Italian, Spanish, Japanese and Chinese.

ABG (Automatic Background) MODE

Normally, set to ON (factory setting). Cutoff luminance will be set to a certain level. Set to OFF if you want to erase the horizontal luminescent line for cutoff level detection that may appear at the upper part of the picture.

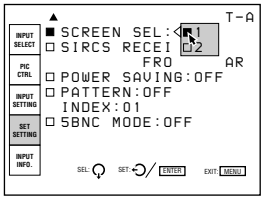


Note

When ABG MODE is set to OFF, the black level of the white balance may change.

SCREEN SEL (Select)

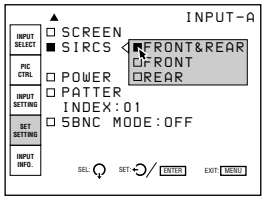
Selects the screen to be used.



1: Bead screen
2: Mat screen

SIRCS RECEIVER

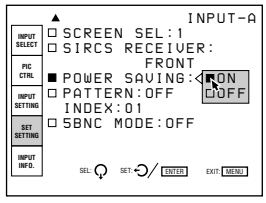
Selects the remote control detectors on the front and rear of the projector, if the wireless remote control does not operate correctly due to the influence of a fluorescent lamp, etc.



FRONT & REAR: Activates both the front and rear detectors.
FRONT: Activates the front detector only.
REAR: Activates the rear detector only.

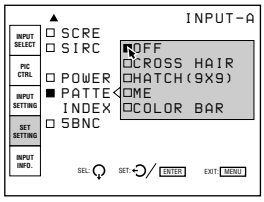
POWER SAVING

When set to ON, the projector goes into the power saving mode if no signal is input for 10 minutes. The screen enters cutoff mode. The power saving mode is canceled when a signal is input or whenever any key is pressed.



PATTERN

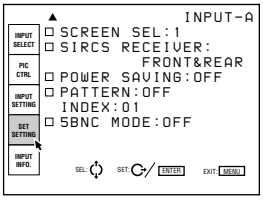
Selects the type of the test pattern to be displayed.



Selectable patterns are: CROSS HAIR, HATCH (9 × 9), ME and COLOR BAR.
Set to OFF when you do not want to display a test pattern.

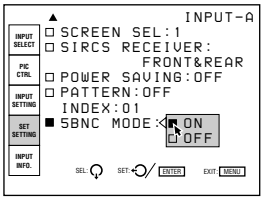
INDEX (Index number)

Indicates the index number of the projector set with the INDEX NO. switches on the rear panel.



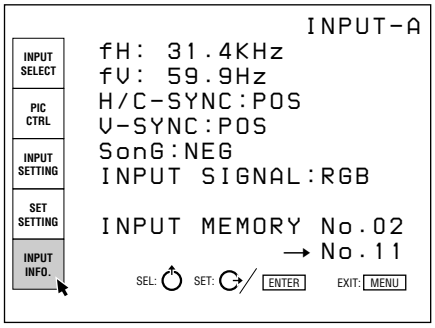
5BNC MODE

Set to ON when you connect the MONITOR OUT connector on the PC-1271/1271M Signal Interface Switcher to the INPUT A connectors with the 5BNC cables.



The INPUT INFO (Information) Menu

The INPUT INFO menu displays the information on the current input signal.



fH (Horizontal frequency)

Indicates the horizontal frequency of the input signal. This indication is not an absolute value, but is only used as a reference.

fV (Vertical frequency)

Indicates the vertical frequency of the input signal. This indication is not an absolute value, but is only used as a reference.

H/C (Horizontal/Composite)-SYNC

Indicates the polarity of the horizontal or composite sync signal. When the picture is being projected using this type of sync signal, the POS (NEG) is displayed in green. When the picture is being projected without using this type of sync signal, the POS (NEG) is displayed in white.

POS: The polarity of the sync signal is positive.
NEG: The polarity of the sync signal is negative.
– – –: No sync signal is input.

V (Vertical)-SYNC

Indicates the polarity of the vertical or composite sync signal.
When the picture is being projected using this type of sync signal, the POS (NEG) is displayed in green. When the picture is being projected without using this type of sync signal, the POS (NEG) is displayed in white.

POS: The polarity of the sync signal is positive.
NEG: The polarity of the sync signal is negative.
– – –: No sync signal is input.

SonG (Sync on Green)

Indicates the polarity of the sync on Green. When the picture is being projected using this type of sync signal, the NEG is displayed in green. When the picture is being projected without using this type of sync signal, the NEG is displayed in white.

NEG: The polarity of the sync signal is negative.
– – –: No sync. signal is input.

INPUT SIGNAL

Displays the type of current input signal.

NTSC 3.58: NTSC 3.58 input signal
PAL: PAL input signal
SECAM: SECAM input signal
NTSC 4.43: NTSC 4.43 input signal
PAL-M: PAL-M input signal
B/W: Black and white input signal
Y/C: S video input signal
RGB: RGB input signal
COMPONENT: Component input signal
HDTV YPBPR: HDTV $Y P_B P_R$ input signal
HDTV GBR: HDTV GBR input signal
IDTV: IDTV input signal from the optional PC-1271/1271M Signal Interface Switcher via the optional IFB-3000 Interface Board installed to the PC-1271/1271M.

INPUT MEMORY NO.

The upper number is the memory number of the data automatically loaded when the current signal is input. The lower number is the new memory number in which the adjustment data of the current input signal is stored. The existent memory number is displayed in green, and a new memory number in yellow.

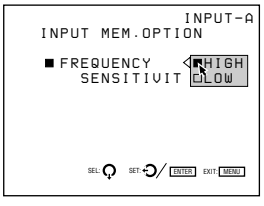
By default seven basic data are preset in the following memory numbers.

Memory number	Preset signal frequencies		Type of the input signal
	fH	fV	
00	15.7 kHz	60 Hz	Video (NTSC3.58)
01	24.8 kHz	56 Hz	RGB
02	31.5 kHz	60 Hz	RGB
03	48.3 kHz	60 Hz	RGB
04	64.0 kHz	60 Hz	RGB
05	31.5 kHz	60 Hz	IDTV (NTSC3.58)
06	33.8 kHz	60 Hz	HDTV (Y/PB/PR)

FREQUENCY SENSITIVITY

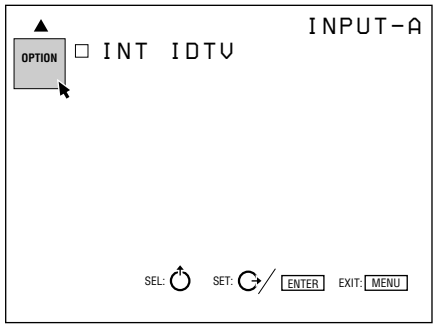
Selects the sensitivity to the frequency deviation of the input signal, with which the INPUT MEMORY data is switched automatically. This item can be selected only for RGB input signals.

Press the ➧ key or the ENTER key on the INPUT INFO menu, and the INPUT MEM. OPTION menu appears. Press the ➧ key or the ENTER key again to show the frequency sensitivity options.



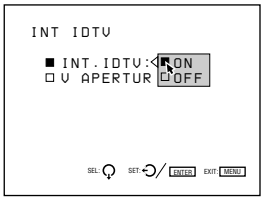
HIGH: This position is selected at the factory.
LOW: Set to this position if the input signal is unstable or flickers. This phenomenon may appear during variable speed playback by the VCR, etc.

The OPTION menu is used when installing the EXB-DS10 Extension Board to the projector.



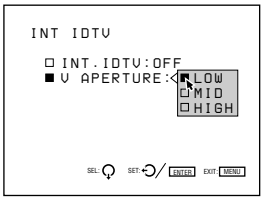
INT. (internal) IDTV

Set to ON to project the video, S video, component or RGB (15 kHz) signal at double density.



V. (vertical) APERTURE

Corrects the sharpness in the vertical direction. You can set the sharpness to the LOW, MID (middle) or HIGH level.

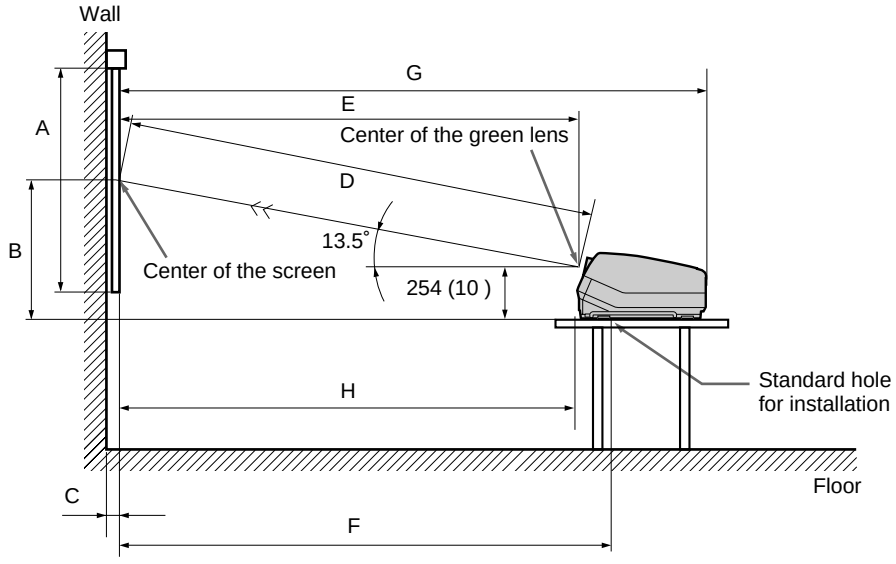


Installation Examples

Installation and the preliminary adjustments should be carried out by Qualified Sony Personnel. This projector allows you to project the picture between 60 and 250 inches.

Installation 1 Floor Installation Using Front Projection Flat Screen

Be sure that the projector is level to the floor.



B: Difference in height between the projector's bottom surface and the center of the screen
E: Horizontal distance between the center of the screen and the center of the green lens
F: Horizontal distance between the center of the screen and the standard hole for installation

Tolerances
B: ±5%
Other measurements: 0% to +5%

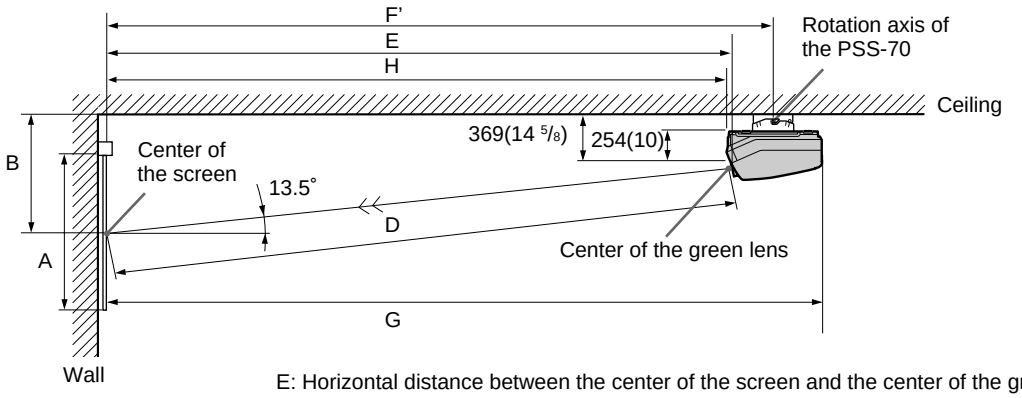
The distances in gray are the factory preset settings. Unit:mm (inches)

Screen size (inches)	60	70	80	90	100	120	150	180	200	250
A (Vsize)	914 (36)	1067 (42)	1219 (48)	1372 (54)	1524 (60)	1829 (72)	2286 (90)	2743 (108)	3048 (120)	3810 (150)
B (Hcent)	710 (28)	777 (30 5/8)	845 (33 3/8)	912 (36)	980 (38 5/8)	1114 (43 7/8)	1320 (52)	1526 (60 1/8)	1662 (65 1/2)	2005 (79)
C (Width)					28[a] (1 1/8) 32[b] (1 5/16)	32[c] (1 5/16)				
D (TD)	1956 (77 1/8)	2240 (88 1/4)	2529 (99 5/8)	2816 (111)	3102 (122 1/4)	3673 (144 5/8)	4551 (179 1/4)	5425 (213 5/8)	6012 (236 3/4)	7466 (294)
E (Xlens)	1902 (74 7/8)	2179 (85 7/8)	2459 (96 7/8)	2738 (107 7/8)	3016 (118 7/8)	3571 (140 5/8)	4424 (174 1/4)	5274 (207 5/8)	5844 (230 1/8)	7257 (285 3/4)
F (Lhole)	2033 (80 1/16)	2310 (91)	2591 (102)	2869 (113)	3148 (124)	3703 (145 7/8)	4556 (179 3/8)	5405 (212 7/8)	5976 (235 3/8)	7389 (291)
G (Lmax)	2535 (99 7/8)	2812 (110 3/4)	3092 (121 3/4)	3371 (132 3/4)	3649 (143 3/4)	4204 (165 5/8)	5057 (199 1/8)	5907 (232 5/8)	6477 (255 1/8)	7890 (310 3/4)
H (Lfront)	1864 (73 1/2)	2141 (84 3/8)	2421 (95 3/8)	2700 (106 3/8)	2978 (117 3/8)	3533 (139 1/8)	4386 (172 3/4)	5236 (206 1/4)	5806 (228 5/8)	7219 (284 1/4)

a) Sony VPS-80FH and VPS-100FH
b) Sony VPS-100FM
c) Sony VPS-120FH and VPS-120FM

Installation 2 Ceiling Installation Using Front Projection Flat Screen

Use the PSS-70 projector suspension support (not supplied).



E: Horizontal distance between the center of the screen and the center of the green lens

Tolerances
B: ±5%
Other measurements: 0% to +5%

Unit:mm (inches)

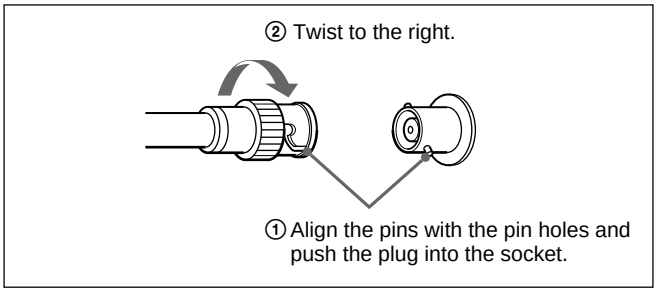
Screen size (inches)	60	70	80	90	100	120	150	180	200	250
A (Vsize)	914 (36)	1067 (42)	1219 (48)	1372 (54)	1524 (60)	1829 (72)	2286 (90)	2743 (108)	3048 (120)	3810 (150)
B (Hcent)	825 (32 1/2)	892 (35 1/8)	960 (37 7/8)	1027 (40 1/2)	1094 (43 1/8)	1229 (48 3/8)	1435 (56 1/2)	1640 (64 5/8)	1777 (70)	2120 (83 1/2)
D (TD)	1956 (77)	2240 (88 1/4)	2529 (99 5/8)	2816 (110 7/8)	3102 (122 1/4)	3673 (144 5/8)	4551 (179 1/4)	5425 (213 5/8)	6012 (236 3/4)	7466 (294)
E (Xlens)	1902 (74 7/8)	2179 (85 7/8)	2459 (96 7/8)	2738 (107 7/8)	3016 (118 7/8)	3571 (140 5/8)	4424 (174 1/4)	5274 (207 5/8)	5844 (230 1/8)	7257 (285 3/4)
F' (Lpss)	2166 (85 3/8)	2442 (96 1/4)	2723 (107 1/4)	3001 (118 1/4)	3280 (129 1/4)	3835 (151)	4688 (184 5/8)	5537 (218 1/8)	6108 (240 1/2)	7521 (296 1/8)
G (Lmax)	2535 (99 7/8)	2812 (110 3/4)	3092 (121 3/4)	3371 (132 3/4)	3649 (143 3/4)	4204 (165 5/8)	5057 (199 1/8)	5907 (232 5/8)	6477 (255 1/8)	7890 (310 3/4)
H (Lfront)	1864 (73 1/2)	2141 (84 3/8)	2421 (95 3/8)	2700 (106 3/8)	2978 (117 3/8)	3533 (139 1/8)	4386 (172 3/4)	5236 (206 1/4)	5806 (228 5/8)	7219 (284 1/4)

Connection Examples

When making connections:

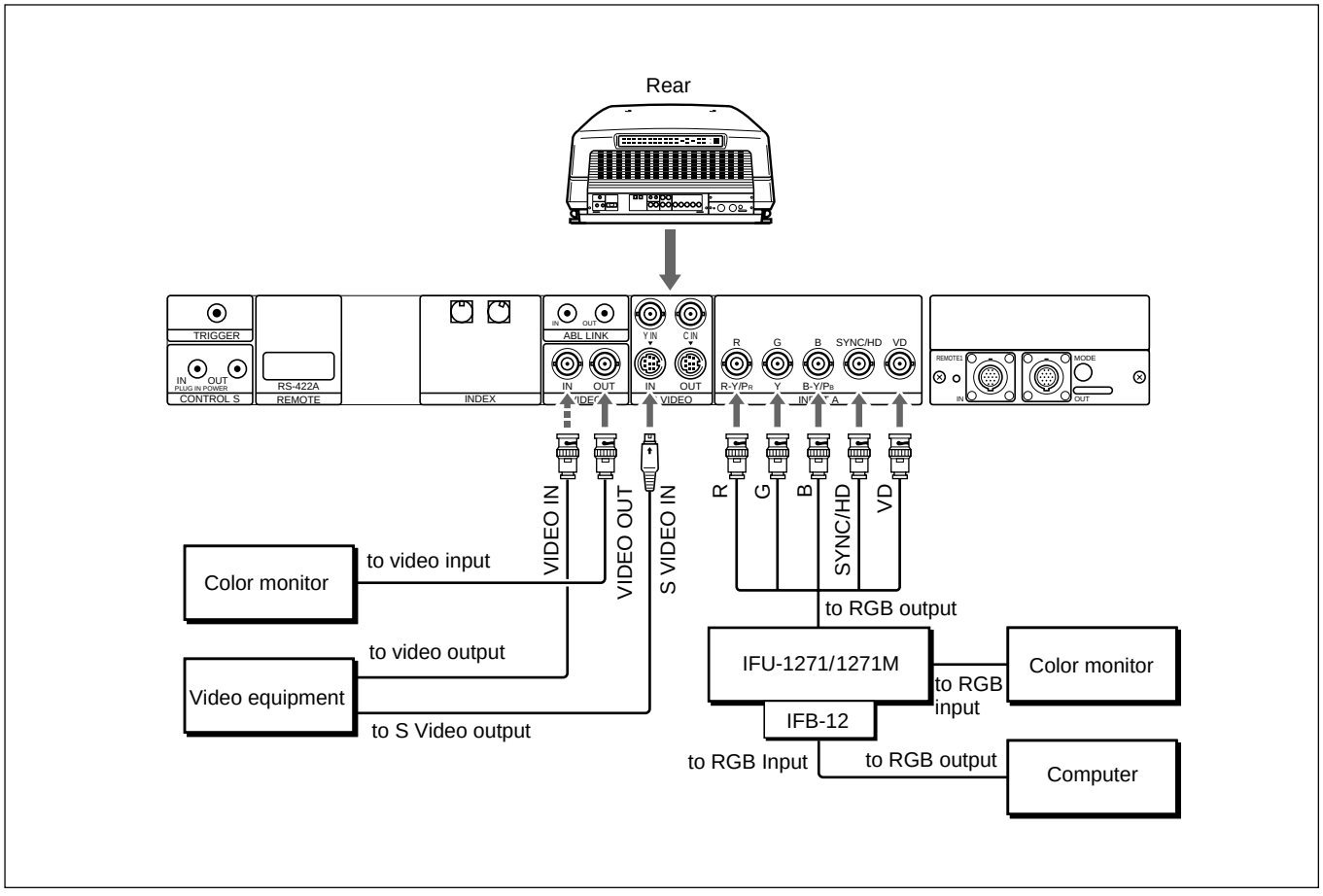
- Before connecting any cables, make sure that each piece of equipment to be connected is turned off.
- Use cables appropriate for the equipment to be connected.
- A loose connection may cause hum or noise.
- When disconnecting a cable, pull it out by the plug; not the cable itself.
- Also refer to the instruction manual of the equipment to be connected.

Connecting a BNC connector:



Connecting Directly to the Projector

Use the IFU-1271/1271M Signal Interface Unit.

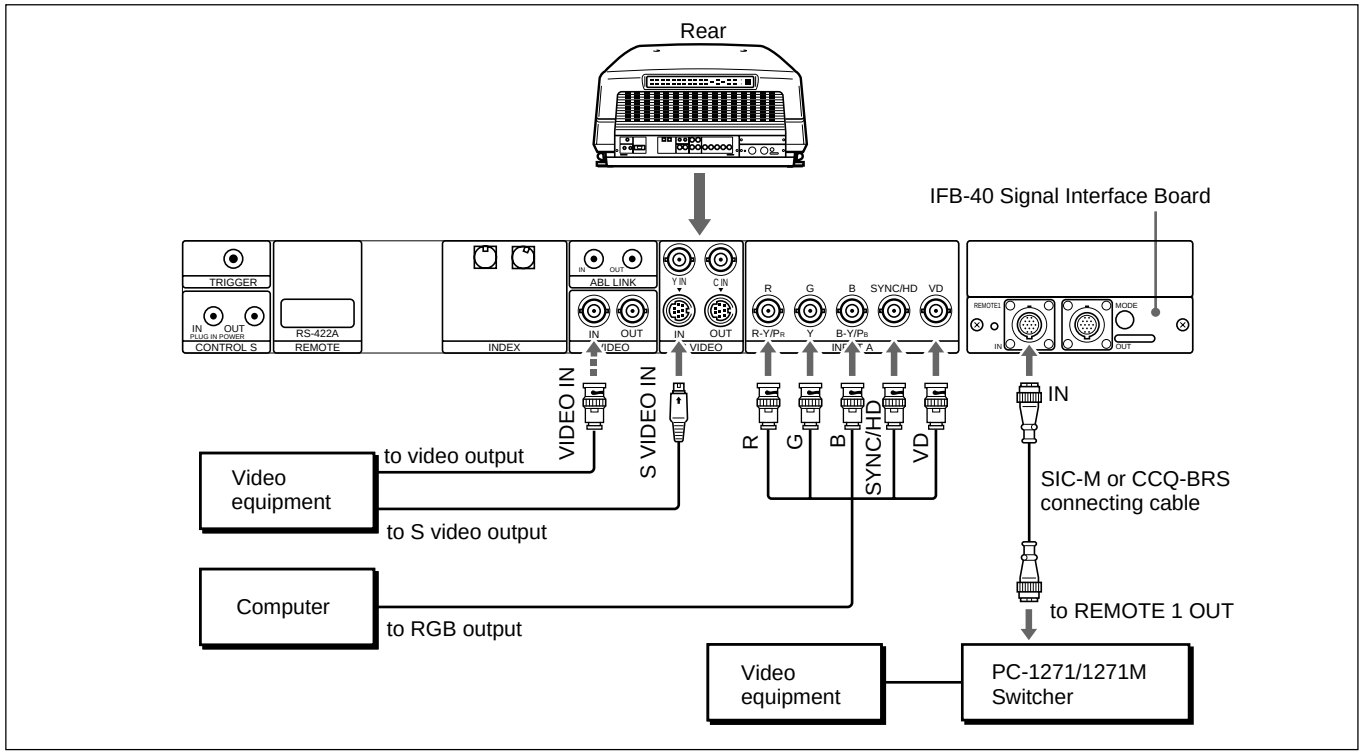


Setting up

- Set INPUT-A in the SET SETTING menu to RGB.
  For details, see "The SET SETTING Menu" on page 31 (EN).
- Select VIDEO or S VIDEO by pressing the INPUT SELECT keys on the remote control or by setting VIDEO in the INPUT SELECT menu.
  For details, see "The INPUT SELECT Menu" on page 25 (EN).

Using the Signal Interface Switcher

When you connect the PC-1271/1271M Signal Interface Switcher (not supplied) to the IFB-40 Signal Interface Board (installed on the projector by default), you can connect easily various input sources.



Choose the appropriate cable from the following table.

1 m	2 m	5 m	10 m	15 m	25 m	50 m
—	CCQ-2BRS	CCQ-5BRS	CCQ-10BRS	—	CCQ-25BRS	CCQ-50BRS
SIC-M-1	—	SIC-M-5	—	SIC-M-15	SIC-M-25	SIC-M-50

Notes

- Insert the female and male plugs of the SIC-M or CCQ-BRS cable correctly.
- You can extend the SIC-M or CCQ-BRS cable up to 50 m.
- The video signal input to the signal interface board installed to the INPUT B section should not exceed 70 MHz. When projecting the video signal which exceeds 70 MHz, connect the signal source to the INPUT A connectors using the 5BNC cables.

Setting up

- Set INPUT-A in the SET SETTING menu to RGB.
  For details, see "The SET SETTING Menu" on page 31 (EN).
- Select VIDEO or S VIDEO by pressing the INPUT SELECT keys on the remote control or by setting VIDEO in the INPUT SELECT menu.
  For details, see "The INPUT SELECT Menu" on page 25 (EN).
- Set the SINGLE/SECOND/OTHER select switch on the switcher to SINGLE.

Troubleshooting

If the projector appears to be operating erratically, try to diagnose and correct the problem using the following guide. If the problem still persists, consult with qualified Sony personnel.

Symptom	Cause	Remedy
The power does not turn on.	The MAIN POWER switch is turned off.	Press the MAIN POWER switch on the projector *(see page 17 (EN))*.
The power turns on and immediately turns off.	There may be an internal problem.	Check the error code in the error code window on the rear of the projector and consult with qualified personnel.
Picture does not appear.	If no menu appears, external signal and/or sync is not input correctly.	Check the input signal and sync in the INPUT INFO menu and connect them correctly *(see page 34 (EN))*.
	If menu appears with no input, sync connection is not correct.	Check SYNC SEL in the INPUT SETTING menu and connect the sync correctly, if necessary *(see page 29 (EN))*.
	If no menu appears with no input, there may be an internal problem.	Consult with qualified personnel.
Picture is too dark.	Contrast is set to minimum.	Adjust the contrast with the CONTR + key *(see page 19 (EN))*.
	Clamp setting is not correct.	Change the clamp setting in the INPUT SETTING menu *(see page 28 (EN))*.
Picture is distorted.	The input signal is not selected correctly.	Select a correct signal in the INPUT A or INPUT B option in the SET SETTING menu *(see page 31 (EN))*.
Error code “10” appears and the projector cannot accept any other command than channel selection.	The input signal is unstable.	Check the input signal.

Specifications

Optical characteristics

Projection system
3 picture tubes, 3 lenses, horizontal inline system

Picture tube
7-inch high luminance, with coolant sealed

Projection lens
HACC (High-resolution Aspherical and Color Corrected) multicoating lenses

Projected picture size
Factory-adjusted to 120 inches (diagonal measure)
Range: 60 to 250 inches (diagonal measure) adjustable

Light output
ANSI lumen [1] (color temperature: 6500°K)
160 lm (fH: 64 kHz, fV: 50 Hz)
135 lm (fH: 15 kHz, fV: 60 Hz)
Peak white: 800 lm
All white: 200 lm

Electrical characteristics

Color system
NTSC, PAL, SECAM, NTSC4.43, and PAL-M switched automatically

Resolution
700 TV lines (video input)
1000 TV lines (HDTV input)
1280 × 1024 pixels (RGB input at fH: 64 kHz, fV: 60 Hz)

RGB inputs
Horizontal frequency: 15 kHz to 64 kHz
Vertical frequency: 38 Hz to 150 Hz

Test signal
Various test pattern generators incorporated

Input/Output

VIDEO
VIDEO IN: BNC type (1)
Composite video input, 1 Vp-p ± 2 dB, sync negative, 75 ohms terminated
VIDEO OUT: BNC type (1)
Loop-through output of VIDEO IN

S VIDEO
Y IN: BNC type (1)
Luminance signal, 1 Vp-p ± 2 dB, sync negative, 75 ohms terminated
C IN: BNC type (1)
Chrominance signal, 1 Vp-p ± 2 dB, sync negative, 75 ohms terminated
S VIDEO IN: 4-pin mini-DIN (1)
Y (luminance) signal: 1 Vp-p ± 2 dB, sync negative, 75 ohms terminated
C (luminance) signal: 0.286 Vp-p ± 2 dB, 75 ohms terminated (NTSC)
0.3 Vp-p ± 2 dB, 75 ohms terminated (PAL)
S VIDEO OUT: 4-pin mini-DIN (1)
Loop-through output of S VIDEO IN

INPUT A
BNC type (5)
Analog RGB/Component:
R/R-Y: 0.7 Vp-p ± 2 dB, 75 ohms terminated, positive
G: 0.7 Vp-p ± 2 dB, 75 ohms terminated, positive
G with sync/Y: 1 Vp-p ± 2 dB, 75 ohms terminated, sync negative
B/B-Y: 0.7 Vp-p ± 2 dB, 75 ohms terminated, positive
SYNC/HD: Composite sync: 0.6–8 Vp-p high impedance, sync positive/negative
Vertical sync width: wider than horizontal scanning interval (1H)
VD:Vertical sync: 0.6–8 Vp-p high impedance, sync positive/negative
Vertical sync width: Wider than horizontal scanning interval (1H)
HDTV $Y/P_B/P_R$:
Y: 1 Vp-p ± 2 dB, 75 ohms terminated
Tri-level sync: ±0.3 Vp-p,
Bi-level sync: 0.3 Vp-p
P_B/P_R: 0.35 Vp-p ± 2 dB, 75 ohms terminated

1) ANSI lumen is a measuring method of American National Standard IT 7.215.

HDTV GBR:
G with sync: 1 Vp-p ± 2 dB, 75 ohms terminated, Tri-level sync: ±0.3 Vp-p, Bi-level sync: 0.3 Vp-p
B/R: 0.7 Vp-p ± 2 dB, 75 ohms terminated

CONTROL S IN/PLUG IN POWER: Stereo minijack type (1)
5 Vp-p, plug in power, DC 5 V maximum output 60 mA
OUT: stereo minijack type (1)
Loop-through output of CONTROL S IN

TRIGGER Minijack type (1)
POWER ON: DC 5 V, output impedance 4.7 kilohms
POWER OFF: 0 V

ABL LINK IN: minijack (1)
OUT: minijack (1)

RS-422A D-sub 9-pin DIN type (1)

General

Dimensions 603 × 345 × 671 mm (23 3/4 × 13 19/32 × 26 13/32 inches) (w/h/d)

Mass Approx. 54.2 kg (119 lb 8 oz)

Power requirements
VPH-D50Q: 120 V AC, 50/60Hz
VPH-D50QM: AC 220 – 240 V, 50/60 Hz

Power consumption
Max. 450 W
Standby mode: 7 W
Power saving mode: 185 W

Operating temperature
0°C to 40°C (32°F to 104°F)

Operating humidity
35% to 85% (no condensation)

Storage temperature
–20°C to 60°C (–4°F to 140°F)

Storage humidity
10% to 90%

Supplied Accessories
Remote control RM-PJ1000 (1)
Size AA (R6) batteries (3)
Remote control cable (15 m (49.5 feet) long) (1)
AC Power cord (1)
Power plug adaptor (1)
Lens cap (3)
Adjustment tool (1)
Operating Instructions (1)

Acquired safety regulations
VPH-D50Q:
UL1950, CSA 950
FCC class B, IC class B
DHHS, DNHW
VPH-D50QM:
TÜV (EN60950), PTB
CE-Marking, C-Tick Mark

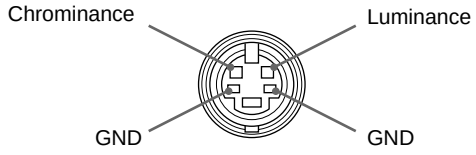
Optional accessories

Signal Interface Switcher PC-1271/1271M
Signal Interface Unit IFU-1271/1271M
Projector Suspension Support PSS-70, PSS-10
Interface Board IFB-12/20/21/30/1000
Signal Interface Cable
SIC-10/20A/20B/20C/21/22/23/24/24A/24B/25/26/26A/30/31/M1/5/15/25/50
CCQ-BRS2/5/10/25/50
Extension Board EXB-DS10 (Internal IDTV board)
Remote Commander RM-PJM800
Remote Control Unit RM-PJ10
Mouse Receiver Unit RM-PJ20
Signal Adaptor ADP-10/20
HD D-sub 15-pin to 5 BNC cable SMF-400
HD D-sub 15-pin to HD D-sub 15-pin cable SMF-401
9-pin remote cable for RS-422A RCC-5G/10G/30G
Screen
VPS-80FH (80" flat)
VPS-100FH (100" flat)
VPS-120FH (120" flat)
VPS-80FM (80" flat, powered)
VPS-100FM (100" flat, powered)
VPS-120FM (120" flat, powered)

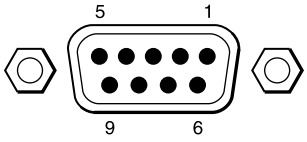
Some items may not be available in certain areas. For details, please consult your nearest Sony office.

Pin assignment

S VIDEO connector (4-pin, mini-DIN)



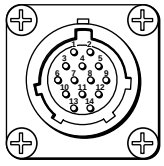
RS-422A connector (D-sub 9-pin, female)



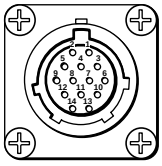
Pin No.	Signal	
1	GND	Ground
2	$\overline{\text{TX}}$	$\overline{\text{Receive}}$
3	RX	Transmit
4	GND	Ground
5	Not used	
6	GND	Ground
7	TX	Receive
8	$\overline{\text{RX}}$	$\overline{\text{Transmit}}$
9	GND	Ground

REMOTE 1 connectors on IFB-40

IN (male)



OUT (female)



Pin No.	Signal	Signal level
1	GND	Ground
2	HD/C. sync	1 Vp-p ± 3 dB
3	SIRCS	5 Vp-p ± 1 dB
4	N.C.	Non connection
5	GND (SIRCS)	Ground
6	B/C	B: 0.7 Vp-p ± 3 dB, 75-ohm C (NTSC): 0.286 Vp-p ± 3 dB, 75-ohm C (PAL): 0.3 Vp-p ± 3 dB, 75-ohm
7	GND (B.R)	Ground
8	GND (G)	Ground
9	G/Y	G: 0.7 Vp-p (sync-on-green: 1 Vp-p) ±3 dB, 75-ohm Y: 1 Vp-p ± 3 dB, 75-ohm
10	RGB/Video	5V / 0V
11	R/C. video	R: 0.7 Vp-p ± 3 dB, 75-ohm C. Video: 1 Vp-p ± 3 dB, 75-ohm
12	C. Video/YC	5V / 0V
13	Audio	500 mVrms, output impedance 1 kohm
14	V. sync	1 Vp-p ± 3 dB, 75-ohm

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